Principles and functionalities of the eTIR international system

Working Party on Customs Questions affecting Transport (WP.30)
147th session

André Sceia / October 10-13, 2017
Overview

• Computerization status
• eTIR principles
• eTIR functionalities
• eTIR declaration mechanisms
• CBA and GE.1 Recommendations
• Pilot projects
  – Georgia-Turkey eTIR pilot project
  – UNECE-IRU eTIR project between Iran and Turkey
TIR computerisation status

- Transport sector
- Other Customs administrations
- Guarantee chain
- SafeTIR
- TIR-EPD
- ITDBonline
- Register of stamps and seals
- National Declaration Mechanism (Single Windows)
- Customs
- TIR operations management
The eTIR system
a public private partnership

Private

Transport Operator

Guarantee Chain

Public

Customs

eTIR international system

B2C

C2B

C2C
eTIR main principles

Management of guarantee data by customs
eTIR main principles

Customs to customs data exchange

- Customs system of country 1
  - Push/Query Information Notifications
  - eTIR international system
  - Information push and query
  - Guarantee chain system
- Customs system of the country 2
  - Push/Query Information Notifications
eTIR high-level architecture

Customs

UNECE

TIR guarantee & transport DB

ITDB

TIR DB

TIR guarantee & transport DB

ITDB

TIR DB

TIR holders

TIR associations

C2C data exchange

TIR-EPD

B2C C2B

IRU

IRU

B2C

B2C

B2C
Declaration mechanism - Departure

1. Holder
   - Guarantee request
2. Guarantee chain
3. Advance cargo information reference
4. Advance cargo information
   - Incl. guarantee reference and itinerary
5. Customs office of departure
6. Risk Analysis
7. ITDB
8. Other Customs along the itinerary
9. Customs office of departure
10. National information system
11. eTIR international system
12. Accompanying document
13. Declaration reference
14. Inspection and sealing
15. Vehicle
16. Goods
17. Holder
18. Holder
19. Holder
20. Holder
21. Holder
22. Holder
23. Holder
24. Holder
Declaration mechanism – en route

1. Advance cargo information, incl. previously accepted declaration(s) + other TIR transport info
2. Customs along the itinerary
3. Risk analysis
4. eTIR international system
5. Holder
6. National information system
7. Accompanying document
8. Customs office of entry

Sealed vehicle

Holder

Customs office of entry

ITDB
Today: Diverging data requirements

Diverging additional requirement:
- electronic safety and security data
- additional paper documents
WP.30 recommendation

137th session (Geneva, 10–13 June 2014)

“Considering that safety and security data requirements have their own legal basis and in view of the difficulty in agreeing on common requirements, the Working Party also decided that, even if they are related to TIR transports, those requirements should be left optional in the standard eTIR declaration. As a consequence, the Working Party instructed GE.1 to continue to work on the development of a standards eTIR declaration.”

ECE/TRANS/WP.30/274, para. 15
eTIR standard declaration

Additional data requirements for each country (e.g. safety and security)

Declaration approved by the customs office of departure

Differentiated declaration data and mechanisms (all including the data contained in the standard declaration)
Declaration options

- Customs system of the country of departure
  - Third party system (e.g. TIR EPD)
  - eTIR international system
  - Secure system to system connection (e.g. VPN)

- Holder

- Authentication based on private requirements (e.g. user/password)

- Customs system of the country of departure
  - eTIR international system
  - Secure system to system connection (e.g. VPN)

- Holder

- Authentication based on national requirements (e.g. electronic signature)

- Customs system of the country of residence of the holder

- Holder

- Secure Web service
CBA - Costs

- Development costs
- Initial costs
- Operational and hosting costs
- Helpdesk costs
- Costs to adapt national applications

For 12 years (2 years of development)

<table>
<thead>
<tr>
<th></th>
<th>scenario 1</th>
<th>scenario 2</th>
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<tbody>
<tr>
<td>Development costs</td>
<td>1,127,000</td>
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<tr>
<td>Initial costs</td>
<td>792,500</td>
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<td>Oper. + Hosting costs</td>
<td>1,378,468</td>
<td>668,962</td>
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<tr>
<td>Help Desk costs</td>
<td>2,210,000</td>
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<tr>
<td><strong>Total Costs</strong></td>
<td><strong>5,507,968</strong></td>
<td><strong>4,798,462</strong></td>
</tr>
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</table>
Benefits

- For Customs: **1.44 USD / Transport**
- For the guarantee chain: **2 USD / Transport**
- For holders: **5.5 USD / Transport**
GE.1 Recommendations

• Considering that the eTIR project seems to be highly profitable, it is recommended that the eTIR system should be implemented as soon as possible, including at national level, right after the required legal provisions, the technical specifications and the project roadmap are finalized and agreed on.

• Considering the commercial sensibility of the data that will be handled by the eTIR international system and in view of the relatively small costs differences with the cloud solution recommended in the CBA, it is recommended that the eTIR international system be hosted at UNICC or UNOG data centres;

• Considering the availability on the market of message broker software, including open source solutions, it is recommended to consider the use of “off the shelf” solutions for the development of the eTIR international system.

• Considering the large benefits for TIR Carnet holders, a potential avenue to explore for the financing of the eTIR international system seems to be through a contributory system per TIR transport, similar to the one used for TIRExB.
Georgia-Turkey eTIR pilot project

Parties

Organization

Customs Administrations
Georgia-Turkey eTIR pilot project

Scope
Georgia-Turkey eTIR pilot project

Objective

UNECE
Central Exchange Platform

Data Exchange

CUSTOMS

CUSTOMS
Iran-Turkey eTIR pilot project

Parties

2 Organizations

2 Customs Administrations

2 Associations

Holders
Iran-Turkey eTIR pilot project
Scope - Step 1

Map showing the route from Izmir to Teheran via Turkey and Iran.
Iran-Turkey eTIR pilot project
High-level architecture

Customs (Turkey and Iran)

TIR ITDB

eTIR Web Services

UNECE

TIR guarantee & transport DB

Replication

C2C data exchange

TIR ITDB

Trusted Data Exchange Web Services

IRU

TIR Customs Portal Web Services

IRU Internal Portal

TIR Holder Portal

TIR DB

TIR Association Portal Web Services

TIR holders

TIR associations
Thank you